

ITEM (E.2) ROAD MAINTENANCE

1. DESCRIPTION OF WORK

This item includes road maintenance activities on Forest Service Roads 17 (West Cowpen) and 17C (Cherry Gap) associated with the timber removal component of this SPA contained in Appendix F.

(a)Scope of Work

The Partner shall provide all tools, equipment, supplies, labor and transportation required to maintain Forest Service Roads 17and 17C in accordance with the specifications described below.

(b)Location and Description

Roads to be maintained are located within the boundaries of:

National Forest: Chattahoochee
District: Conasauga
County: Murray
State: Georgia

See Appendix C: Service Project Area Map for location of project sites.

Road	Road Name	Activity	Miles
17	West Cowpen	During and Post Haul Maintenance	6.8
17C	Cherry Gap	Pre, During, and Post Haul Maintenance	0.7
Total			7.5

GENERAL

Partner's maintenance responsibility begins (1) after partner performs Prehaul Maintenance on a road listed in the Road Maintenance Requirements Schedule; or (2) for all other roads, when Partner begins to use the road. Occasional travel by Partner's light vehicles, prior to beginning of construction clearing or logging operations in the area accessed by the road, does not constitute beginning of use. Partner is not required to perform routine maintenance during periods of inactivity. During periods of inactivity, Forest Service will perform maintenance only as required to meet its needs.

The Partner shall maintain roads, commensurate with the Partner's use, in accordance with the Road Maintenance Requirements Summary and Road Maintenance Specifications. Performance of road maintenance work by the Partner may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on the Partner's operating schedule for Timber Removal projects.

If the Partner elects to use different roads than those listed in the Road Maintenance Requirements Summary, the Contracting Officer or designee shall determine the Partner's commensurate share of road maintenance and/or revise road maintenance deposits.

Unless the Contracting Officer or designee agrees in writing otherwise, prehaul maintenance shall be completed on any portion of road prior to hauling on that portion.

The Partner shall attend to the following situations as they occur and concurrently with sale operations: remove slides, fallen timber and other obstructions and overhanging brush obstructing road sight distance. Excess material resulting from any maintenance activity shall not be placed at locations where it will wash into streams.

The Forest Service shall prepare a revised Road Maintenance Requirements Schedule to reflect changes in the original haul route.

ROAD MAINTENANCE DEFINITIONS

Wherever the following terms are used in the Road Maintenance Specifications, the meaning shall be:

Base Course. Material placed on the Subgrade to distribute concentrated wheel loads.

Berm. Curb or dike constructed to prevent Roadway runoff water from discharging onto embankment slope.

Borrow. Select Material taken from designated borrow sites.

Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the

Traveled Way. A Drainage Dip does not block the movement of traffic.

Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains and downpipes.

Lead-off Ditches. A ditch used to transmit water from a Culvert, Drainage Structure or Drainage Dip outlet to the natural drainage area.

Maintenance Activity. Items of work leading to the minor restoration and upkeep of a road and necessary to sustain the road's anticipated traffic.

Material. Any substance specified for use in the performance of the work.

Prehaul Maintenance. Road maintenance work to be accomplished prior to the roads use. Roads receiving prehaul maintenance shall be shown on the Timber Removal Area Map.

Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

Roadway. The portion of a road within the limits of excavation and embankment.

Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of Base and Surface Course, if any.

Slide. A concentrated deposit of materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated raveling.

Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

Surface Course. The Material placed on the Base Course or Subgrade to enhance traction, distribute concentrated wheel loads and resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

Waterbar. A dip in the Roadbed which intercepts surface runoff and diverts the water off the Roadway. A Waterbar is not designed to be traversable by logging trucks.

2. TECHNICAL SPECIFICATIONS

Partner shall maintain roads according to the following specifications in coordination with the Timber Removal component of this SPA described in Appendix F.

ROAD MAINTENANCE REQUIREMENTS SCHEDULE

Agreement Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications							
	From	To		1040							
FS17C	FS17	0.7 mi	0.7	P							

P = Partner Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications									
	From	To		1020	1040								
FS17	Old Hwy 2	6.8 mi	6.8	P									
FS17C	FS17	0.7 mi	0.7	P	P								

P = Partner Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications									
	From	To		1020	1040								
FS17	Old Hwy 2	6.8 mi	6.8	P	P								
FS17C	FS17	0.7 mi	0.7	P									

P = Partner Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

ROAD MAINTENANCE ACTIVITY SPECIFICATIONS

INCLUDED SPECIFICATIONS

Activity No.	Activity Specification Title
1020	Surface Blading (Dozer)
1040	Spot Surface Course Placement

ACTIVITY 1020 - SURFACE BLADING (DOZER)

DESCRIPTION

1.1 Surface blading is keeping a native or aggregate surfaced Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown, Inslope or Outslope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning bridge decks, Drainage Dips, and Lead-off Ditches. This work may be accomplished using a crawler tractor with a dozer blade capable of angling.

REQUIREMENTS

3.1 Surface blading shall be performed before, during, and after Partner's use as often as necessary to facilitate traffic and proper drainage.

3.2 The surface blading shall preserve the existing cross-section. Ruts, chuckholes and corrugations that affect the smoothness of ride do not have to be removed unless they become excessive or interfere with proper drainage. Surface Course Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to conserve surface Material and to provide for a thorough mixing of the Material being worked.

3.3 On native surfaced roads, Material generated from backslope Sloughing, and ditch cleaning may be blended with the surface Material being worked. On aggregate surfaced roads this Material shall not be blended with Surface or Base Course Material unless agreed otherwise.

3.4 Roadway backslopes shall not be undercut.

3.5 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to retain the existing line, grade, and cross-section.

3.6 Intersecting roads shall be bladed for a distance of 50 feet to assure blending of the surfaces.

3.7 Rocks or other Material remaining on the Traveled Way after the final pass that are 4 inches in diameter or larger shall be removed. The unsuitable Material shall be disposed of by sidecasting unless agreed otherwise.

3.8 Material resulting from this activity shall not remain on or in structures, such as Culverts, cattle guards, ditches and Drainage Dips.

3.9 Material resulting from this activity, plus any accumulated debris, shall be removed from bridge decks and the deck drains opened.

ACTIVITY 1040 - SPOT SURFACE COURSE PLACEMENT

DESCRIPTION

1.1 Spot surface course placement includes subgrade preparation, furnishing, spreading and shaping Materials in accordance with the Requirements.

MATERIALS

2.1 Surface course Material will be in accordance with the Requirements, 3.2.

REQUIREMENTS

3.1 Subgrade Preparation. Prepare subgrade to receive surface course Material at locations as designated on-the-ground by the Forest Service on roads listed below. Prepare the subgrade by shaping the Roadbed to approximately the original cross-section and consistent with adjacent sections.

3.2 Furnish and spread Material at spot locations designated on the ground by the Forest Service as follows.

Road Number	Road Name	Haul Period	Type Material	Quantity (C.Y./Tons)
FS 17C		Pre-Haul	#4 stone	18 tons
FS 17C		During Haul	#4 stone	36 tons
FS 17		Post-Haul	#4 stone	180 tons

3. QUALITY CONTROL AND ASSURANCE

This section sets forth the procedures, guidelines and coordination between Forest Service and Partner that will be used in evaluating the performance of the Partner's sub-contractor for completing road maintenance work.

Representatives

Section IV.A - Project Contacts of this Agreement identifies the individual designated as Contracting Officer Representative and Inspector (if assigned) with responsibility of inspecting, monitoring and assessing work performance of the Partner's sub-contractor.

Partner shall, prior to start of project work, designate in writing a qualified representative to inspect sub-contractor performance as described in the Quality Control Plan contained in Appendix B.

Quality Control

The Partner shall prepare, as part of the Technical Proposal (Appendix B), a Quality Control Plan for project work. This Plan should demonstrate how the Partner – through organization, supervision, and self-inspection – will maintain work performance of its sub-contractor at the Acceptable Quality Level. Such plan should contain an inspection system, detailing inspection frequency, types of data to be collected for monitoring performance, and methods for identifying and preventing defects in the quality of work performed.

Acceptable Quality Level

Performance Objective and Standard	Acceptable Quality Level	Method Of Assessment
Road Maintenance	Maintenace meets described specifications and is performed during specified intervals (pre, during, post) as necessary to maintain roads commensurate to Partner's use. The timing of work accomplished shall be based on Partner's Operating Schedule for Timber Removal as defined in Appendix F.9.	Partner's records, notes; Forest Service inspections, records, reports; gravel load tickets

Quality Assurance

The Forest Service will monitor progress to ensure that the Partner/sub-contractor is providing the quality promised in their Quality Control Plan and that work meets performance standards. The Partner will be responsible for providing Forest Service with documentation that gravel has been placed at locations designated by Forest Service in amounts specified in Technical Specifications by providing gravel load tickets. Work cannot be accepted without such documentation.

Forest Service inspections will be documented on Daily Diaries and placed in the contract file. If work does not meet the Acceptable Quality Level given above, a Notice of Non-Compliance will be issued by the COR. The COR may issue other cure notices if work is not being performed in a timely manner or does not comply with contract specifications.